Tacoma Narrows Bridge Project Nighttime Construction Noise Quarterly Report: January - March 2004

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INTRODUCTION

The Washington State Department of Transportation (WSDOT) and Tacoma Narrows Constructors have been issued a noise variance by the Tacoma-Pierce County Health Department. The variance was issued for noise levels expected to result from construction work between 10:00 p.m. and 7:00 a.m. in conjunction with the construction of the new Tacoma Narrows Bridge. The variance was issued with several conditions, including that WSDOT provide quarterly reports to the Health Department on activities relevant to the variance.

This is the fifth quarterly report and covers the period including January through March 2004. The following areas are addressed in this report:

- Overview of Nighttime Construction Activities
- Communication Activities
- Complaint Response & Resolution
- Upcoming Activities
- Attachments
 - 1. Public Mailings
 - 2. Nighttime construction activities log
 - 3. Citizen Contacts & Complaints
 - 4. Noise Measurements

OVERVIEW OF NIGHTTIME CONSTRUCTION ACTIVITIES: JANUARY - MARCH '04

Work activities took place on the project site between 10:00 p.m. and 7:00 a.m. on a total of 91 nights during the period including January, February, and March 2004. Of this total number of nights, there were 40 nights when specific construction activities took place, and 51 additional nights when the two new caissons were staffed by project workers.

Nighttime construction work during this period took place in the Narrows at the new bridge caissons, at the temporary concrete batch plant, and along the SR 16 mainline roadway in the vicinity of Stone Drive, 24th St. and 36th St. Specific descriptions of the type, location, and times of this work are provided in Attachment 2.

During this period, two complaints were received by WSDOT about noise from the project, one of which was attributable to a project construction activity taking place between 10:00 p.m. and 7:00 a.m.

The caisson work sites in the Narrows are staffed 24 hours per day, 7 days per week. Two work shifts are scheduled on working days. Construction activities include barge operations,

rebar installation, concrete placement, and dredging. During dredging operations, two twelve hour shifts are employed with eight hours of dredging during each shift. During hours when construction work is not actively underway, workers on the caisson work sites may be operating generators or maneuvering barges. The first phase of dredging on the Gig Harbor side caisson was completed during March.

Regular concrete production, typically two or three times per week, continued during this period at the temporary concrete batch plant. On 4 occasions during this period batch plant operations began between 6:00 - 7:00 a.m. On 1 occasion during this period batch plant operations extended until 10:30 p.m. A total of 3 hours of batch plant operations took place between 10:00 p.m. and 7:00 a.m. during this period.

Roadway work requiring temporary lane closures took place during nighttime hours on the SR 16 mainline on the Narrows Bridge, and in the vicinity of Stone Drive, 24th Street, and 36th Street (20 nights.)

COMMUNICATION ACTIVITIES

> INFORMATION & HOT LINE

A telephone information and "hot" line continues to be operational providing information about upcoming nighttime construction activities. It also provides residents an opportunity to communicate <u>at any time</u> of day with a live person about questions and/or concerns relating to the project nighttime construction activities and noise. This service operates 24 hours a day, 7 days per week. The phone number is 253-620-4440.

Nighttime construction activity information is provided in a recorded message, updated on a daily basis to provide the most current information. Messages can also be left on the information line concerning the nighttime construction activities and these messages will be responded to within 24 hours (on project working days).

Residents can also communicate directly with a person who can provide relevant information about project nighttime construction activities, accept comments, and if appropriate, directly contact WSDOT project staff. When project construction activities are taking place, the person staffing the "hot line" is able to immediately contact WSDOT project staff and to relay comments/complaints received. If requested by the caller, WSDOT project staff will return the call as soon as feasible.

> WEBSITE

To maximize public access to timely information about nighttime construction activities, a section of the project's web site is dedicated to providing quick, easy access to information concerning nighttime construction activities. Information on this web site is updated daily to provide the most current information.

Comments and concerns about the nighttime construction activities can be submitted to project staff through the web site and will be responded to within 24 hours (on project working days).

> POSTAL CARRIER ROUTE MAILINGS

As described in the Communication Plan for Nighttime Construction Noise, information sheets have been delivered by postal carrier routes to residences and businesses along the project corridor.

Prior to each calendar month, residents along the project corridor have been mailed notification flyers about nighttime work activities scheduled to take place throughout the upcoming month.

An update flyer was mailed to two postal carrier routes to provide notification of an add on activity in late March.

Copies of the notification flyers distributed during this period are provided in Attachment 2.

COMPLAINT RESPONSE & RESOLUTION

During this quarter (January - March '04), WSDOT received two complaints about noise from the project, one of which was attributable to noise from a project construction activity occurring between 10:00 p.m. and 7:00 a.m.

Attachment 3 includes summaries of these contacts and their resolution.

One contact/complaint received was with regard to an unidentified disturbing noise that after extensive follow-up could not be associated with a specific project activity.

The second contact/complaint was received and addressed with regard to the first phase of dredging operations at the caisson on the Gig Harbor side of the Narrows.

UPCOMING ACTIVITIES

During the upcoming quarter, April - June '04, construction activities will continue throughout the project site along the SR 16 corridor from Jackson Avenue to the vicinity of 36th Street.

Work activities in the Narrows will continue at both new caisson locations. The caisson work sites will be staffed 24 hours per day, 7 days per week. Dredging operations have been initiated at both caisson locations with the first phase of dredging now complete at each caisson. The dredging operations take place at one caisson at a time, and are accomplished using two 12 hour work shifts during each of which 8 hours of dredging production is scheduled. Six day work weeks may be necessary to stay on schedule. Dredging is conducted using derrick barges and clamshells. The noise variance states that expected noise levels from this activity could be approximately 90 dBa within 50 ft. of the equipment. Measured noise levels (see attached logs) have been notably less than this level (Lmax = 70 dBa at 50 ft. from equipment.) Dredging will continue until both caissons have reached the necessary embedment in the Narrows bottom, scheduled to be accomplished by June 2004. The second and intended final phase of dredging on the Gig Harbor side caisson is scheduled to take place during the second half of April.

During late April, roadway work along mainline SR 16 is scheduled during nighttime hours in the vicinity of Jackson Ave. on the Tacoma side of the Narrows. This work, for installation of drainage culverts across the mainline SR 16 roadways, will take place during nighttime hours due to the need for the temporary closure of traffic lanes on SR 16.

During May, roadway work along the westbound SR 16 mainline in the vicinity of 36th St. (weigh station area) is expected. This work will be re-building shoulder areas for temporary routing of traffic. Again, this work will take place during nighttime hours due to the need for the temporary closure of traffic lanes on SR 16.

Concrete production will continue at the temporary batch plant typically two to three times per week. Concrete pours will be at both caisson locations in the Narrows, both anchorage sites for the new Narrows Bridge, and retaining wall locations. The majority of concrete production will take place between 7:00 a.m. and 10:00 p.m., but some pours will start earlier and may continue later due to the magnitude of the pours as described in the noise variance.